



## Connecting with Consumers: Creating Health Solutions that Stick

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Patient engagement is the name of the game, but many product developers are struggling to create health solutions that “stick.” Much of the problem lies in their approach: patients aren’t just patients—they are sophisticated consumers with distinct expectations for the products, services, and brands they choose. How can medical device and digital health solution providers deliver differentiated user experiences that will resonate with today’s informed consumers? What are some strategies for creating long-term engagement with health products?

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### **Moderator**

**Ron Pierce**, Vice President and Director of Design Strategy & Research, Karten Design

### **Panelists**

**Julia Hu**, CEO, Lark Technologies

**Scott Davie**, Senior Director of R&D, Patient Monitoring Product Development, Medtronic

**Khan Siddiqui**, MD, Co-Founder & CTO, hiji

# Presenters



## Ron Pierce

As the leader of Karten Design's Design Research and Design Strategy disciplines, Ron believes that the answers to all design problems lie with the people who interact with a product. With his focus on design's ability to grow a business, Ron has observed the shifts in design awareness among senior corporate executives through two decades of working with leaders such as Apple, LG Electronics, Panasonic, Hitachi, Motorola, and Roche. He has shared his perspectives on people and business across the nation, including for the University of Michigan Ross School of Business, the USC Marshall School of Business, and Medical Device Manufacturers West. Ron received his degree from Kent State University with a dual major in Industrial Design and Graphic Design. Prior to joining Karten Design in 2003, he was a principal at Hauser Inc.



## Julia Hu

Julia Hu is CEO and Founder of LARK Technologies, an app-based digital health platform that offers one-on-one coaching for improved diet, sleep, and health activity. Lark has been lauded by Vogue, Shape, and Fitness magazines, and was one of Apple's Top 10 Apps in 2015. Even more importantly, it's been adopted by nearly 1 million consumers of various ages, from 30-somethings to seniors. Julia believes in using artificial intelligence to measure everything, but that information is not inherently engaging. Julia and her team work to distill data into simple, actionable recommendations, delivered through well-established communication behaviors—specifically, conversations via text.



## Dr. Khan Siddiqui

Dr. Khan Siddiqui is a physician, spent 4 years in Microsoft's Health Solution Group, is a serial entrepreneur, and Chief Technical Officer at high. High is a digital health community that lets users track and understand their health. A three-year study recently validated that high can improve blood pressure outcomes with their incentive-based program, which encourages regular monitoring. Consumers can access high's health stations today in more than 10,000 stores nationwide, where they can engage with their health as they go about their daily business. Dr. Siddiqui, who has studied gambling addiction, including MRI readings, believes that people are motivated by challenges, games, and rewards, and has adapted his findings to get people engaged with something healthy.



## Scott Davie

Scott Davie is Senior Director of R&D and Patient Monitoring Product Development at Medtronic. He works with Zephyr Hospital Systems, providing real-time physiological and biomechanical monitoring. Originally developed to monitor military personnel and elite athletes, Zephyr is currently used on patients in hospitals to monitor heart rate and respiration. The company is now developing a home kit to create a smoother transition between hospital and home. Like many of you here, Scott is selling a product to healthcare professionals. But the end user is a consumer. In this case, one that is typically about 80 years old, and marginally tech-literate. He's addressing how to create incentives for patients when the benefit they experience is indirect.

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Take Away #1

## To connect with consumers, you must first understand who they are.

### Best Practices

#### Uncover Consumers' Internal Motivators

Motivations play an important role in consumer behavior. Almost every action is driven by an underlying motivation; this can range from convenience, security, and fear to self-worth, social ranking, and the desire to live to see one's grandchildren. Once you recognize the motivations driving consumers' everyday behaviors, you can align your incentives with their desires.

- » Higi's engagement platform creates incentives based on five key motivators the company has identified through research.

#### Modality Matters

Solutions must be presented in a format that's appropriate for users' specific needs and preferences. Choose a modality that's both relevant and accessible to your target user base.

- » The typical user of Medtronic's Zephyr system is a high-needs, 80-plus-year-old patient who is transitioning home from the hospital post-surgery. As such, Medtronic utilizes a high-touch intervention program consisting of regular phone calls from an assigned nurse practitioner to effectively reach its user base.
- » Lark's platform is seeing a 340% greater uptake among males than females, compared with traditional diabetes prevention programs (DPPs) that consist mostly of females (85%). This disparity can be attributed to a fundamental difference in the way males and females prefer to communicate: Lark uses "bite-sized" text-based conversations, while DPPs leverage focus group-style discussions in which members verbally share their experiences and hold each other accountable—a modality that doesn't appeal strongly to men.

#### Consider Cross-Cultural Contexts

While some motivators may be fundamentally similar across cultures, the way these values are expressed and communicated often varies greatly from culture to culture. Solution developers should be conscious of these differences as they select their engagement modalities and platforms.

- » For example, Lark found that U.S. users were far more motivated by competition than their international counterparts, so the company adjusted its first-generation product accordingly.
- » Whereas lack of exercise is a big problem in the U.S., physical activity is an everyday part of life in rural India. Higi modified its wellness program accordingly for the Indian market before installing kiosks in farmer's markets across the country.

#### Action Items to Implement

- » Dig into the context of your consumers' lives in order to gain an understanding of who they are, what motivates them, how best to reach them, and the impact that cultural norms may have on their behaviors and priorities.
- » Use these learnings to inform the best incentives and engagement strategies for your solutions.

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Take Away #2

To create “sticky” health solutions that motivate and engage, you must meet consumers where they are—adapting your solution to their needs, rather than the other way around.

**Best Practices**

**Tap into Existing Habits**

The less change your solution requires of consumers, the better. What are your consumers’ habits? Seek to be a part of that existing routine, rather than forcing consumers to create a new one.

- » Higi’s kiosks are strategically placed in grocery stores and retail pharmacies (which the typical adult visits three to five times per year), rather than in doctor’s offices (which most adults visit once every two years).

**Provide Choice**

Consumers ultimately want to feel like they’re in control of their lives. Design interactions that empower them to make their own decisions.

- » Higi’s system lets users decide which incentives they want to work toward, whether it’s a discount on active wear or a donation to their favorite charity.
- » Lark found that its users responded better to gentle suggestions for which nutrients to incorporate into their next meal, rather than recommendations of what to order at a restaurant.

**Personalization is Key**

Consumers get engaged when insights are highly relevant to them. Whether through technology or a personal touch, learn users’ individual needs and goals, and customize your solution to achieve success. Users will be more engaged when they experience a solution that reaches out to them.

- » Each Zephyr user is assigned a nurse practitioner who, through regular phone calls with patients, grows to understand and tailor interventions to their personal circumstances and health needs. As the relationship deepens over time, so does the patient’s engagement in their health.
- » Lark’s system creates custom 16-week programs to help consumers reach their specific health goals. Its AI-enabled chat coach adapts to consumers’ communication styles and senses of humor, creating a uniquely scalable way to personalize user interaction.

**Action Items to Implement**

- » Study the consumer’s journey with your solution.
- » Build in enough variability for consumers to make their own choices.
- » Relate data and information to users’ personal health needs and goals.

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Take Away #3

## Keeping consumers motivated and engaged in the long term requires constantly evolving your solution.

### Best Practices

#### Deliver Fresh Experiences

Device and app fatigue are real concerns, especially in healthcare. Find ways to deliver surprising, new experiences that keep users coming back to your solution.

- » Lark uses machine learning to continually evolve and improve its coach's conversations, making them more relevant to each user over time.
- » Higi introduces new incentives, partners, and challenges all the time, encouraging consumers to keep checking back to find out what new rewards they can earn.

#### Grow with Your Users

People change over time, and your solution should change with them. Build in multiple levels of engagement that recognize and reward consumers' progress.

- » Lark's platform adapts over the course of its 16-week program, offering frequent coaching initially, when users are just starting out, but easing up over time as users learn to manage their health on their own.
- » Leveraging principles with roots in gambling and gamification, Higi's platform starts out simply, with easy goals and fun rewards. As users progress, the challenges build in complexity, and rewards become increasingly compelling.

#### Test and Iterate

Don't assume you know what consumers want; always test your solution with them. The often-surprising results will allow you to make data-driven decisions about your solution.

- » Lark constantly runs A/B tests with its chat function to identify the communication strategies and interventions users respond to best.

#### Build a Robust Feedback Loop that Empowers Consumers

The best solutions provide long-term value when they empower users to manage their health on their own. Create a robust, instantaneous feedback loop that helps consumers understand the cause-and-effect relationships between their behaviors and their health outcomes.

- » Medtronic's Zephyr system transmits patients' vital signs to a central hospital station every 60 seconds. Any data point that surpasses the system's predetermined thresholds triggers instant intervention from a clinician, who then provides in-the-moment coaching to the patient over the phone.
- » Lark pulls data from disparate devices and systems (e.g., blood glucose monitors, connected weight scales) to identify events (such as a hypoglycemic event) that trigger the delivery of actionable insights and interventions.

#### Action Items to Implement

- » Infuse your solution with fresh content, ideas, and incentives to keep consumers on their toes (partnerships can be a great way to extend the reach of your solution).
- » Actively test and adapt your solution to avoid becoming stagnant with users.
- » Develop feedback loops that empower consumers with long-term education.



## Conclusion

Human emotion and behavior is the most unpredictable part of health engagement. Engaging health consumers comes down to putting people at the center of your product development process. It requires knowing your target audience intimately. When you can relate to your customers—their experiences, habits, preferences, and motivations—you can respond in an authentic and meaningful way. Developing this level of intimacy can be challenging. It can require completely new competencies for many businesses, especially those that typically sell to medical professionals. It means spending time with health consumers in the environments where they live and work, listening and observing. And it's not just a one-time dialog. Solutions that deal in behavior change must account for changing consumers. As a user progresses along their health journey, their motivation, thought patterns, and goals will evolve.